RTIP ID# *(required)*: ORA000161

TCWG Consideration Date: March 28, 2008

Project Description *(clearly describe project)*
The project is located in the City of Costa Mesa in Orange County, California. Specifically, it is along State Route 55/Newport Boulevard and extends from about 460 feet north of 19th Street to 17th Street with minor work south of 17th Street for restriping. The 0.68-mile highway segment within the project limits is a six-lane divided roadway. The project limits include five signalized intersections, along with several unsignalized T-intersections where local streets intersect either the northbound or the southbound lanes of the highway. The project proposes to add a fourth northbound lane from 17th Street to 19th Street and a fourth southbound lane from the project northern limit to Broadway. Curb locations would not change along the northbound lanes between Old 17th Street and 19th Street, or along the southbound lanes between Harbor Boulevard and 19th Street. Existing curbside on-street parking along the northbound lanes would be retained from 17th Street to Flower Street. To accommodate the addition of lanes, median reconfigurations, minor curb relocations along the southbound lanes of Newport Boulevard, and lane-width reductions are proposed. In addition to roadway improvements, spot sidewalk and curb reconstruction and enhancements will be evaluated where needed to meet Americans with Disabilities Act (ADA) requirements, and landscaping/aesthetic improvements will be made.

Type of Project *(use Table 1 on instruction sheet)*
Change to existing state highway

County	**Narrative Location/Route & Postmiles** Route 55 (Newport Boulevard), PM 1.4 to 2.1
Orange	**Caltrans Projects – EA#** 098401

Lead Agency: City of Costa Mesa

Contact Person	**Phone#**	**Fax#**	**Email**
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Hot Spot Pollutant of Concern *(check one or both)* **PM2.5** X **PM10** X

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

Categorical Exclusion (NEPA)	**EA or Draft EIS**	**FONSI or Final EIS**		**PS&E or Constr uction**	**Other**
			X		

Scheduled Date of Federal Action: June 2008

NEPA Delegation – Project Type *(check appropriate box)*

Exempt	**Section 6004 – Categorical Exemption**		**Section 6005 – Non-Categorical Exemption**
		X	

Current Programming Dates *(as appropriate)*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	2/2003	(ongoing)	(ongoing)	9/2008
End	6/2005	6/2008	6/2008	6/2009

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*

The project need is driven by current and future operational deficiencies, travel delays, roadway accidents, deficient pedestrian access and poor walkway conditions along SR-55/Newport Boulevard. The purpose of the project is to improve traffic operations, decrease delays, decrease accidents, improve safety and pedestrian conditions, and promote a viable downtown area by increasing roadway capacity and improving sidewalk conditions and connectivity.

Traffic Capacity/Operational Deficiencies

The existing and future ADT volumes on study roadway segments along Newport Boulevard are shown on Figures 3 and 6 (attached). Existing (2002) ADT for the segment north of 19th Street is 100,000 vehicles, while ADT south of 19th Street and north of 17th Street varies from 74,000 to 77,000 vehicles. These are very high traffic volumes for this type of highway facility, indicating this section of Newport Boulevard is approaching capacity. The high ADT volumes result in existing unacceptable levels of service, operational deficiencies, and congestion at key intersections which will worsen in the future as volumes are predicted to increase, regardless of whether the project is implemented. Caltrans has not employed a specific lowest acceptable LOS for state highway facilities, as they are determined on a case-by-case basis. The City of Costa Mesa has adopted LOS D as the lowest acceptable level of service for peak-hour intersection volumes. Figures 2 and 5 (attached) illustrate the existing and future morning and evening peak-hour intersection turning movement volumes at the five study intersections, on which the LOS analyses are based. Based on 2002 volumes, the Newport Boulevard/19th Street intersection operates at an unacceptable level of service, LOS E, during both morning and evening peak hours (Table 7, attached). Two other intersections, Newport Boulevard/18th Street and Newport Boulevard/17th Street, operate at LOS D. During the morning peak period, primary delay at all five study intersections is due to northbound congestion. During the evening peak period, primary delay results from northbound congestion at the intersections of Newport Boulevard/19th Street, Newport Boulevard/Broadway, Newport Boulevard/18th Street/Rochester Street, and Newport Boulevard/17th Street. Year 2025 LOS at the five study intersections during the morning and evening peak hours is expected to worsen to an unacceptable level due to the increase in traffic volumes (Table 7, attached). One of the purposes of the proposed project is to reduce traffic congestion at all study intersections and improve or maintain LOS compared to existing conditions in the project area by increasing the traffic-carrying capacity of Newport Boulevard. Delay is expected to decrease at all study intersections with the proposed improvements.

Safety

According to Traffic Accident Surveillance and Analysis System (TASAS) data, actual accident rates in the project area from April 1999 through March 2002 exceeded the state averages in all categories for a similar type of roadway.

Actual and Average Accident Rates in Project Area (April 1999 to March 2002)

Route Segment	Actual			State Average		
	Total	Fatal	Fatal + Injury	Total	Fatal	Fatal + Injury
Newport Boulevard – 17th Street to 19th Street	3.37	0.020	2.29	2.27	0.018	1.06

Rates are per million vehicle miles

The TASAS data indicates that a majority of the accidents occurring within the project limits were either rear-end (61 percent) or broadside (20 percent) collisions. The primary collision factor for the majority of these accidents was due to speeding (47 percent). Recent City data summarizing accidents occurring between January 1, 2000, and December 31, 2002, indicate that the three intersections documented for the highest number of collisions within the City of Costa Mesa were along Newport Boulevard at 19th Street (84 accidents), 17th Street (62 accidents), and Harbor Boulevard (55 accidents). A majority of the accidents were rear-end collisions that occurred due to unsafe driving speeds. Based on the TASAS and City accident data, a majority of the accidents were rear-end or broadside collisions. These types of accidents typically

indicate an elevated congestion-level, a condition under which motorists may tend to disregard traffic controls and speed up through intersections to avoid additional delay. The additional fourth through lane proposed by the project would reduce individual intersection delay and is expected to decrease accident occurrences of these types.

Pedestrian Conditions

Pedestrian accessibility is deficient along the west side of Newport Boulevard from 17th Street to the commercial center south of 18th Street/Rochester Boulevard, as there is no sidewalk along southbound Newport Boulevard. Additionally, portions of sidewalks and curbs along Newport Boulevard have damaged concrete, and many driveways and curb ramps along the northbound side of the roadway do not meet ADA requirements. Improvements to sidewalks and pedestrian connectivity would improve pedestrian safety and likely increase pedestrian use of the downtown area.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

The land uses immediately adjacent to the project are typical of an urban downtown area. They mainly include retail and light commercial developments in strip malls. Example facilities include restaurants; clothing and furniture stores; and gas stations. See attached aerial photos.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Because affected facility has closely spaced signalized intersections, see below section for data for major intersections. See attached Table 7, "Intersection LOS Comparison," from approved project *Traffic Impacts Analysis* for LOS data.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Because affected facility has closely spaced signalized intersections, see below section for data for major intersections. See attached Table 7, "Intersection LOS Comparison," from approved project *Traffic Impacts Analysis* for LOS data.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

17th Street: AADT=81,000*, Truck ADT=2900* (3.6%), Year 2009

19th Street: LOS=F, AADT=81,000*, Truck ADT=2900* (3.6%), Year 2009

* These traffic volumes apply to both the No Build and Build alternatives

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

17th Street: LOS=F, AADT=81,000*, Truck ADT=2900* (3.6%), Year 2025

19th Street: LOS=F, AADT=81,000*, Truck ADT=2900* (3.6%), Year 2025

* These traffic volumes apply to both the No Build and Build alternatives

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*

No redistribution effects are expected, as there are no nearby parallel arterials. Due to the additional capacity that will be provided, implementation of this project is expected to improve traffic flows on State Route 55/Newport Boulevard through Costa Mesa.

Comments/Explanation/Details *(attach additional sheets as necessary)*
Please see attached for an aerial photo exhibits showing the project area, the adjacent land uses, and the street network in the vicinity of the project. Also see attached table and exhibits from Traffic Impacts Analysis, analysis regarding particulate matter, and copy of approved project *Air Quality Technical Study*.

Particulate Matter (PM_{10} and $PM_{2.5}$) Analysis

The proposed project is within a nonattainment area for federal $PM_{2.5}$ and PM_{10} standards. Therefore, per 40 CFR Part 93, analyses are required for conformity purposes. However, the EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in section 93.123(b)(1) as an air quality concern. The project does not qualify as a POAQC because of the following reasons:

i. The proposed project is not a new or expanded highway project that would have a significant number or a significant increase in diesel vehicles. As stated in the approved project *Traffic Impacts Analysis* and environmental documentation, the proposed project will be providing additional capacity to accommodate anticipated future volumes. As a result, it is assumed that truck traffic volumes along this segment of SR-55 would be the same under both the Build and No-Build conditions. The truck AADT volume (3.6%) is expected to increase from 1900 to 3640. These are below the thresholds for a Project of Air Quality Concern (POAQC). This type of project will improve state highway operations by reducing traffic congestion.

ii. The proposed project does not affect intersections that are at LOS D, E, or F with a significant number of diesel vehicles. Although the project limits do include intersections that are at LOS D, E, and F and will remain at LOS D, E, or F with implementation of the project, as shown in Table 7, “Intersection LOS Comparison” from the approved project *Traffic Impacts Analysis*, none of these intersections has a significant number of diesel vehicles.

iii. The proposed project does not include the construction of a new bus or rail terminal.

iv. The proposed project does not expand an existing bus or rail terminal.

Therefore, the proposed project meets the CAA requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed project would not create a new, or worsen an existing, PM_{10} or $PM_{2.5}$ violation. As stated in the project Air Quality Technical Study: “Less than 5 percent of the vehicles traveling along this project area are diesel trucks. Although the project would not reduce the number of vehicles, it would reduce the idling time of these vehicles. Since diesel exhaust emissions would be highest when a vehicle is idling, this project would result in lower diesel exhaust emissions. This in turn would result in lower toxic risks in the area. It is expected that the traffic volumes in the area would increase 20 percent by the year 2025. Without the proposed project, the emissions and the toxic risk from vehicles in the area would only rise. This project will result in a lowering of the potential toxic risks in the area.”